

REMARKS

Status of the Application:

Claims 4, 6–10, 12, 13 and 15–23 are the claims of record of the application. Claims 4, 6–10, 12, 13 and 15–23 have been rejected.

This is also a Request for Continued Examination

Applicants Request Continued Examination under 37 CFR 1.114. The associated fee is included.

Claim Rejections 35 USC § 103

In paragraph 4 of the office action, claims 4, 6–10, 12–13, 15–23 were finally rejected under 35 USC 103(a) as being unpatentable over Rivette (U.S. Patent 6,339,767) in view of Fu et al (U.S. Patent 7,010,580, herein after Fu).

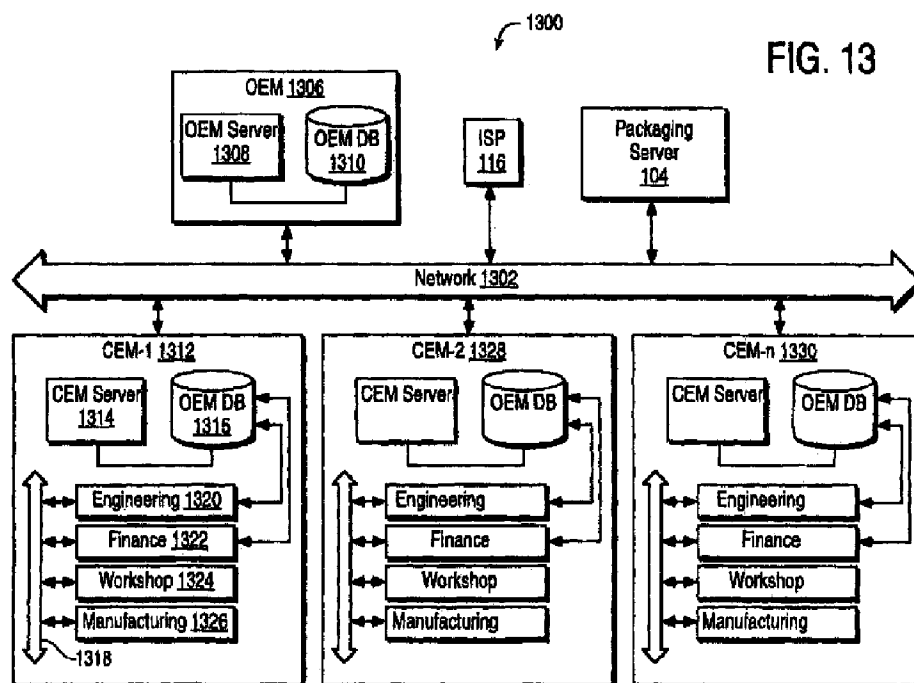
Fu vs. the present invention

How Rivette does not anticipate the rejection was discussed in the previous response to the previous office action.

Before discussing the rejection in detail, Applicants wish to note that one major difference between Fu and Applicant's claims invention is that Fu is not storing for multiple bills of material (BOMs) stored in the same computer system.

Fu's intent states in col. 3, lines 24-27 is clearly related to access control administered by a single data owner, such a single owner selectively sharing its data with business partners.

The Examiner is directed towards FIG. 13 of Fu, which shows that Fu envisions his invention being used by one data owner.



This data owner is the OEM 1306 in Fu. Note that only one such OEM is shown in the drawing and mentioned in the explanatory text in col. 15, lines 59–67, col. 16, and col. 17 lines 1–16. The other entities are OEM-1, OEM2, etc, and are entities that are able to access some of the OEM 1306's data. The clearly intended purpose of Fu's invention is not to provide a system which hosts data for multiple data owners, but to provide a means by which a singular data owner (OEM 1306) can selectively grant access to its data to others (OEM-1, OEM-2, etc.) without requiring the implementation of access control within a single database and global namespace. This is entirely consistent with what the Applicants describe in the background section as prior art. Applicants state that "...master item lists and BOMs are conventionally maintained on a company's computer system and not placed in a common computing environment with data from other companies."

Thus, for example, Fu's claim 1 and all other claims only speak of one data owner. Note the singular one data owner in the claims, not multiple data owners.

In more detail

With respect to Applicants' claim 4, the examiner asserts that Rivette teaches "storing the plurality of BOMs in a processing system" as storing BOMs in database in a processing system (fig. 47, col. 22, lines 30–35).

Applicants don't disagree with the Examiner's contention that Rivette teaches "storing a plurality of bills of material (BOMs) in a processing system", but the cited text in col. 22, lines 30–35 does not mention BOMs and appears to be entirely unrelated storing BOMs.

The Examiner further asserts that Rivette teaches “each BOM describable as a tree with each node an element” as each BOM is a hierarchical and recursive data structure that identifies the subassemblies of a product with many nodes where the first node is an element Frame, second node is an element Screw. Each hierarchical BOM is represented as a tree. The Examiner further asserts that Rivette teaches in col. 77, lines 25–35; col. 74, lines 35–55 that “each element in each BOM having an owner of a set more than one owner” each record or patent in each BOM associated with a Corp_entity_ID of a set Corp_entity_IDs. An Corp_entity_ID is represented as an owner. The Examiner further asserts that Rivette taught in Fig. 36, and col. 77, lines 25–35; col. 74, lines 35–55 that “each BOM having an owner of the set of owners, such that BOMS associated with different owners are stored in the same processing system” as BOMS are associated with different Corp_entity_Ids such as Corp1, Corp2 of the set of Corp_entity_Ids ().

Both Rivette and Applicants store multiple BOMs of multiple entities on the same system. However, Rivette allows only one entity access to all data.

Both Rivette and the present invention include the aspect of storing multiple BOMs in a single system, This aspect is secondary to Rivette, and therefore, Rivette does not include the security aspects included in the present invention and needed when the system is designed for providing access to multiple entities, each having confidential information stored in the system, and each wishing to restrict access to others.

Rivette does provide for access control, but the access control is administered by superusers designated by the one corporate entity for which Rivette is aimed. In the present invention, access control is to provide for different entities to have secure and confidential access within the shared space to the data they own, while other entities are restricted from such access.

Rivette has a single access hierarchy for the one corporate entity. In fact, because Rivette is for carrying out patent analysis, a sensitive subject, a customer of the Rivette system would be hesitant to have that same system be used for patent analysis by another, e.g., by a competitor.

The present invention includes independent access hierarchies, one for each entity owning data, with more than one such entity using the system.

Rivette	Aspect(s) of the present invention
System is for a single entity. See col. 10, lines 64-65; col. 16, lines 12-39; col. 75, lines 39-44; col. 76, lines 12-13.	System is for multiple entities (owners), each equal to another.
BOMS are of main entity and other entities, but only main entity has total access. A “superuser” is defined.	For each of at least two owners, access to confidential data in any BOM is restricted to the owner of the BOM and any designates of the owner.

The Examiner asserts that Rivette teaches that “each element in each BOM associated with an owner of a set owners” by equating Applicants’ owner with Rivette’s corp_entity_id. While Rivette does provide for several corporations, they are all stated as having a relationship to a single corporation, the main (primary) corporate entity labeled CORP1 in FIGS. 32, 33, 36, and 38. The Examiner refers to col. 77, lines 25-35, and to col. 74, lines 35-55. Rivette does include provision for more than one corporate entity: there is one and only one corporate entity that owns the system, such a corporate entity also called the **customer**, and also called the PRIMARY_CORP (see FIG. 12J) and further corporate entities that may be subsidiaries, or competitors, or be otherwise related to the customer.

Rivette is for a single entity, not multiple entities

That Rivette is for a single corporate entity is emphasized in col. 10, lines 64-65: “The present invention is intended to aid a corporate entity in developing business related strategies, plans, and actions.” Also in col. 75, lines 39-44: “The corporate entity databases 630 include information on the customer corporation, the corporations associated or affiliated with the customer corporation, and/or corporations that are otherwise of interest to the customer corporation, such as the customer corporation's competitors or potential competitors.” Also in col. 76, lines 12-13: “A primary_corp database 1231 stores the corp_entity_id of the customer corporation.”

See also Col. 16, lines 12-39 that make clear that in Rivette, *there is one and only one customer, and such customer has access to the whole system*. As is stated “The customer is an entity (such as a company) that has arranged to have use of the system 302 (by purchasing, leasing, or renting the system 302, for example).” Also “The databases 316 and data contained therein are specific to the customer.” The users are all associated with that customer and are, in Rivette called users and operators. (Col. 16, lines 42-47).

Rivette, by being for only one entity, thus teaches away from the inventive aspect of Applicants of there being BOMS with confidential information for a plurality of owners stored together, with access being provided for each of the plurality of owners to such owner’s information, and, for each of at least two owners, access to the owner’s confidential information being restricted to the owner and any designates of the owner.

The examiner admits that Rivette does not explicitly teach the claimed limitations such as "an owner associated with a particular BOM being an entity that controls access to all the information in the particular BOM, wherein for each of at least two different owners, at least one of the BOMs of the respective owner includes confidential information of the owner, such that unrestricted access to the confidential information is limited to the owner of the BOM and any designates of the owner of the BOM".

In fact, **Rivette teaches away from using his invention for multiple data owners**. In col. 16, lines 30-31, Rivette states "Preferably, system 302 is adapted for use by a particular customer. Typically, the customer is a corporate entity." (my emphasis). Additionally, Rivette states explicitly in col. 16, lines 30-31 that "The databases 316 and

the data contained therein are specific to the customer." The following lines (col. 16, lines 34-38) make clear that Rivette intends his invention to be used only for modeling competitor's BOMs, not for enabling access by multiple corporate entities as different data owners: "Also the databases 316 may contain the customer's and the customer's competitors'...manufacturing information..."

The examiner asserts that Fu teaches in col. 17, lines 20-33, lines 50-55; col. 10, lines 1-5 the claimed limitations: "an owner associated with a particular BOM being an entity that controls access to all the information in the particular BOM."

Fu does teach that the owner of a BOM controls access to that BOM; in fact the primary intended benefit of Fu's invention is to enable a single data owner (*who maintains a single database containing that data owner's data exclusively*) to selectively grant other parties access to a subset of the one owner's data.

The examiner further, but erroneously asserts that Fu teaches in col. 17, lines 50-55; col. 10, lines 1-30; col. 4, lines 39-50 the limitation "wherein for each of at least two different owners, at least one of the BOMs of the respective owner includes confidential information of the owner, such that unrestricted access to the confidential information is limited to the owner of the BOM and any designates of the owner of the BOM"

Applicants respectfully but vigorously disagree with the assertion that Fu discloses two different owners having confidential information in the same system. On the contrary, the cited col. 17, lines 50-55 in fact make clear that Fu does not anticipate a single system containing data owned by multiple data owners, much less a system in which each data owner controls access to its own data, and no other data. The cited lines of Fu read:

"A...method...for use in the transaction of business product information between A data owner and a registered user, comprising: preparing a platform independent viewer package by the data owner, wherein the viewer package includes product information data owned by the data owner..."

Similarly, col. 10, lines 1-30 make no mention of multiple data owners. Furthermore, col. 4, lines 39-50 make clear again that Fu intends his invention to be used by a single data owner by stating:

"Further provided is a way to provide controlled access to the information by a user according to predetermined privileges set by the owner of the information, or host." (our emphasis).

Thus Fu, like other prior art, fails to conceive of a single database system in which data owned by multiple data owners is hosted. Fu's intent states in col. 3, lines 24-27 is clearly related to access control administered by a single data owner, such a single owner selectively sharing its data with business partners. It is significant that Fu only mentions business partners in this citation, not competitors (or, for that matter, companies with no relation to one another at all).

Further, **Fu explicitly teaches away from claim 4** (and other claims) by recommending against providing a database with access management of any type, even when a single owner is managing access for authorized users. See col. 2, lines 25–51:

"Another approach is to allow access to a host database that contains information pertaining to the product line...Unfortunately, there are downsides to using a database that render such an application cumbersome and expensive...It is also difficult to maintain the integrity of the data, especially in environments of multiple users."

This is entirely consistent with Applicants recitation on col. 5, lines 7-17 of the present invention where it is stated that: "Generally a company's master item list and the BOMs that it references are closely guarded trade secrets...Thus master item lists and BOMs are conventionally maintained on a company's computer system and not placed in a common computing environment with data from other companies."

Therefore, it would NOT have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fu's teaching to the teaching of Rivette to establish Applicants' claim 4.

Therefore, the Examiner's rejection of claim 4 is overcome. The combination of Rivette and Fu does not teach or suggest Applicant's claim 4.

As to claim 10, the examiner asserts that Rivette teaches all limitations other than the claimed limitation "wherein for each of at least two different owners, at least one of the BOMs of the respective owner includes confidential information of the owner, such that unrestricted access to the confidential information is limited to the owner of the BOM and any designates of the owner of the BOM".

As argued above, Rivette in fact teaches away from the invention.

The examiner then asserts that Fu teaches the claimed limitation "wherein for each of at least two different owners, at least one of the BOMs of the respective owner includes confidential information of the owner, such that unrestricted access to the confidential information is limited to the owner of the BOM and any designates of the owner of the BOM".

As explained in the argument for the rejection of claim 4, Fu not only does not disclose this feature, but teaches away from this feature. **Fu fails to anticipate a single system hosting data owned by multiple data owners.**

Therefore, it would NOT have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fu's teaching to the teaching of Rivette to establish Applicants' claim 10.

Therefore, the Examiner's rejection of claim 10 is overcome. The combination of Rivette and Fu does not teach or suggest Applicant's claim 10.

As to claim 15, the Examiner makes similar argument as to what is anticipated by Fu and Rivette. As argued for claim 4, the combination of Rivette and Fu does not teach or suggest Applicant's claim 15.

Therefore, the independent claims are allowable.

All remaining claims are dependent on one of claims 4, 10, and 15. Therefore, the dependent claims also are allowable.

For these reasons, and in view of the above amendment, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Conclusion

The Applicants believe all of Examiner's rejections have been overcome with respect to all remaining claims (as amended), and that the remaining claims are allowable. Action to that end is respectfully requested.

If the Examiner has any questions or comments that would advance the prosecution and allowance of this application, an email message to the undersigned at dov@inventek.com, or a telephone call to the undersigned at +1-510-547-3378 is requested.

Respectfully Submitted,

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Date

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